

## CLAIMS

What is claimed is:

1. A copper composition, substantially free of other metals, characterized by one or more spots of magnetic attraction to a neodymium iron boron magnet on the surface of the composition.  
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2. The copper composition of Claim 1 wherein the spots of magnetism are observed in a sinusoidal pattern.
3. The copper composition according to Claim 1 wherein the magnetic attraction decreases over time.
- 10 4. The copper composition of Claim 1 wherein the spots of magnetic attraction are present on the radial surface of the composition.
5. The copper composition of Claim 4 wherein the axial surface of the composition is substantially free of spots of magnetic attraction.
6. A copper composition, substantially free of other metals, characterized by point attraction to iron filings.  
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7. The copper composition of Claim 6 wherein the point attraction is measured at or near 77 K.
8. A copper composition characterized by an MFM of Figure 1B.
9. A copper composition characterized by an axially to radially anisotropic by an MFM.  
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10. A copper composition manufactured by exposing a starting composition to an iterative cyclic process in the presence of a carbon source wherein the starting composition does not attract a magnet, the copper composition attract a magnet and there is substantially no difference in Gauss readings  
5 between the starting composition and the copper composition.
11. A copper composition characterized by a magnetic region exhibiting magnetic attraction to a neodymium iron boron magnet and/or iron filings and wherein said composition exhibits a Gauss reading of essentially zero.
- 10 12. A copper composition characterized by a magnetic region exhibiting magnetic attraction independent of pole and wherein said region attracts a ferromagnetic material
13. A copper composition characterized by a magnetic region exhibiting magnetic attraction independent of pole and wherein said region exhibits  
15 a Gauss reading of essentially zero.